



## Corrections Notice

June 8, 2023

Permit Application: SPRMU230307

Property address: 1901 CURVE PLZ;

Following are the comments regarding the plan review for the above referenced application. We have noted several concerns and/or non-conforming items regarding the work to be performed. These items must be addressed through revised drawings submitted online through your My Items page in order to proceed.

### **Building Code Review (Reviewed By: Ted Allen ) – Applicant Response in red – 6/20/23**

Following is a list of items, found during a cursory review that will need to be addressed prior to re-submitting the plans for review. Complications relating to delegated design are not uncommon, though they often surface much later in the project during the inspection phase, or plan review stage following the time of inspections and concrete has been cast which can be an inopportune time. These complications often relate to misunderstandings of roles and responsibilities, whether contractual or design related. Effective implementation of delegated design in a project needs to be carefully coordinated during the Foundation Only approval of construction documents to avoid potential pitfalls and ensure a successfully completed project. Please read Foundation Only Policy and make sure these concerns have been addressed prior to signing and resubmitting for a Foundation Only Permit.

These items and any subsequent review questions will need to be addressed prior to the Foundation Only Permit being issued:

1. Submittal documents consisting of statement of special inspections, reports and other data shown on Sheet S0003 designates the portions of the work that require special inspection and indicates the duties of the special inspectors. Include the following in statement of special inspections and responsibilities:

1. The geotechnical report suggests contacting NWCC to coordinate with the micropile contractor, the foundation design and layout was provided without any mention of product or contractor. As a minimum, three (3) test piles shall be advanced at each building site so that a pre-production pull test may be conducted. **The requirement for test piles will be identified by the micropile engineer in the shop drawings that will be submitted as a deferred submittal.** The person or firm responsible for providing micropiles shall submit final shop drawings, stamped and signed as requested and approved by the Engineer of Record (EOR).

a. Provide frequency of testing per notes of the shop drawing submittal above. **Frequency noted in new chart on S0003 – identified as “Continuous Inspections”**

b. Provide amount of time the reports and inspections for Phase I are to be submitted to the building department. **This note has been added to the chart on S0003.**

c. Otherwise note acceptance of the condition placed on the permit that may appear as a Stop Work Order allowing the permit to be issued that requires Final Micropile Special Inspection Report to be submitted to RCRBD prior to release for inspection of grade beams. **Noted; note added to S0003.**

These items and any subsequent review questions will need to be addressed prior to the Building Permit being issued:

2. Looking at Tables 601 and Reference of Type VA Primary Structural Frame on Sheet G0003 appears to reflect Type IIIB where exterior bearing walls are 2-Hour. **Code matrix revised to remove IIIB reference.** There are also references for FRT wood throughout the plans. Please verify type of construction and note the differences when designing with Type VA and furnish all required fire assemblies. OUTSTANDING: See Item 6 below for comments. **See item 6 for Applicant Response.**
3. Also, the code analysis references COMcheck but was not submitted. RESOLVED: Note Reduced Air Infiltration requires blower door testing. I have set conditions for deferred truss submittal and blower door test to be completed. Truss drawings shall be submitted after they have been reviewed and approved prior to installation and inspections. **NOTED – blower door testing will be completed prior to C of O. Truss drawings will be submitted prior to installation and inspection.**
4. Re: Partition Type N on Sheet A1000: **See Correction Item 6 below**
  - a. Fire-resistance ratings, STCs, FSTCs, and IICs are the results of tests conducted on systems composed of specific materials put together in a specified manner. Many UL listed assemblies are “Proprietary,” meaning that very specific brand name products must be used in the construction of the assemblies. Provide copies of fire-resistive assemblies to include testing of the desired STC rating. RESOLVED **NOTED – Thank you.**
  - b. Many of these systems have furring channels or multiple layers required for fire or sound. Check to see that all materials required in the assembly are represented in the drawings and verify the assemblies apply to the structural members specified on the structural plans. For example, when not specified as a component of a fire-resistance rated wall or partition system, how are wood structural panels permitted to be added to one or both sides? Provide general explanatory notes added to drawings. **See revised sheet A1000 for explanatory notes.** OUTSTANDING: See plans for 2SW2 and Detail 10/S0060 and General Explanatory Note 22 of GA-600-2009 Fire Resistive Design Manual. **Wood Structural Panels are allowed to be added to previously tested and approved fire-rated wall assemblies per ANSI/UL 263, Section VI, Item 6, with the below description:**  
*“The addition of wood structural panels in fire-rated gypsum board wall assemblies is permitted as described in this section. Wood structural panels that are 4 ft wide, minimum 7/16 in. thick oriented strand board (OSB) or 15/32 in. thick structural sheathing (plywood) complying with DOC PS1 or PS2, or APA Standard PRP-108, manufactured with exterior glue, may be applied horizontally or vertically to the framing members. Vertical joints should be centered on studs, and staggered one stud space from the gypsum board joints. The wood structural panels are permitted to be applied either as (1) a base layer (directly to the wall framing and under the gypsum board), (2) in between gypsum board layers, or (3) over the top of the completed gypsum board layers. When wood structural panels are added to wall assemblies that include furring channels, there should be no more than two layers (either gypsum board or wood structural panel or combination thereof) attached to the furring channel. When wood structural panels are added to the wall assembly, the length of the fastener used for the outermost layer (either gypsum board or wood structural panel) should be sized appropriately to accommodate the additional thickness of the wall panel.”*  
**ITEM NO. 1 ABOVE IS THE SCENARIO APPLICABLE TO THIS PROJECT.**

c. Unless otherwise specified, the face layers of all systems shall have joints taped and fastener heads treated. Base layers in multi-layer systems shall not be required to have joints or fasteners taped. Note where the gypsum board extends above the ceiling to floor/roof deck requires joints to be taped and fasteners need to be covered unless an exception is provided. Where required the plans shall show fire-resistance rated partitions extending above the ceiling, not as depicted in Details 9/A0900, 11/A0901, 1/A0910, 2/A0910, Partition Type N on Sheet A1000. RESOLVED **NOTED – Thank you.**

5. While subject to compliance under Chapter 11 of the IBC, any development with seven or more units is subject to Title 9 Article 5 of The Colorado Revised Statutes amended and signed into law on April 29, 2003. Provide narrative to include details of compliance and schedule if dispersed throughout later phases of construction. RESOLVED **NOTED – Thank you.**

6. Provide details of all required fire-resistive construction with complete assemblies to include fire walls, party walls, rated floor and roof ceilings, fire partition and penetrations of wall or floor-ceiling assemblies required to protect penetrations in fire-resistance-rated assemblies in accordance with IBC Section 714. Include STC ratings between all units and public spaces. **Sheet G0004 includes all typical penetration and fire-resistive construction details. STC ratings are included on the wall types on sheet A1000**

OUTSTANDING: An example of a typical building of Type VA construction is a wood frame building in which the interior and exterior load-bearing walls, floors, roofs [those members that are less than 20 feet (6096 mm) to the lowest member] and all structural members are protected to provide a minimum 1-hour fire-resistance rating. See General Explanatory Note 11 of GA-600- 2009 Fire Resistive Design Manual for the addition of excessive insulation.

**The referenced note describes how additional mineral or glass fiber insulation in joist spaces could possibly reduce the fire-resistance rating. All attic sections have eliminated all batt insulation on the upper cord of pre-manufactured wood trusses. Each attic space is treated as a "Cold Attic" construction, and a new typical Roof detail has been added to sheet A1002, and revised details included on A900 and A901.**

6. While the calculations submitted include several notes regarding items to check and some with references to corrections made to the plans, there appear to be several items of concern as follows:

a. Solid sawn header RISA analyzed would fail. RESOLVED **NOTED – Thank you.**

b. Interior 2x4 bearing wall analyzed by Forte would fail by 8%. This may not seem to be much, however, considering the members appear to have been designed with a duration factor of 1.15. For our area use a duration factor of 1.0 (not reduced). RESOLVED **NOTED – Thank you.**

c. Several shear walls analyzed by Tekla failed due to excessive deflection and several other shear wall segments were not analyzed due to aspect ratio exceeding maximum allowable. RESOLVED **NOTED – Thank you.**

d. RCRBD finds the labelling of shear walls on the floor and roof plan to be inconsistent with the calculations and hold down callouts when referencing anchor bolts in concrete. RESOLVED

**NOTED – Thank you.**

**OUTSTANDING** Only two items that appear in the plans with a rating: M30 Fire Test U305 (garage separation) and N60S per GA FILE NO. WP 3242 (walls separating dwelling units in the same building shall be constructed as fire partitions). While there do not appear to be any fire walls or party walls,

**Engineering Review** (Reviewed By: Emrick Soltis, P.E.)

1. See Planning comments.

rated floor and roof ceilings are required due to building of Type VA construction. All structural walls (exterior and interior as referenced in Section 704.10), floor construction and associated secondary members (including decks, cantilevers and floor rim boards), roofs and metal canopies shall be rated as per fire-rated assemblies attached to plans. Please include assembly notes for additional layers of gyp board due to excessive insulation or additional nail/screw length due to structural sheathing.

**Planning Review** (Reviewed By: Kelly Douglas )

1. There is an outstanding DPVC-21-16 condition of approval required to be addressed prior to building permit approval:

Prior to Building Permit issuance, the developer shall pay their proportionate share of potential future roadway and/or intersection improvements at Downhill Drive at US 40 intersection, calculated at 0.62% of 8,333,132.02 or \$51,665.42 – **NOTED – check will be issued at time of Permit Fee payment.**

2. There is an outstanding DPVC-21-16 condition of approval required to be addressed prior to building permit approval:

A development agreement shall be recorded to document phasing prior to building permit approval. **This is in progress. Applicant has signed and notarized the agreed-upon document and dropped off at Planning office on 6/20/23. Once the document is signed and notarized by the City, applicant will record and provide planning with reception number.**

3. There is an outstanding DPVC-21-16 condition of approval required to be addressed prior to building permit approval:

Prior to Building Permit issuance for Phase A, the mural on the commercial container will require approval through the Substantial Conformance process. **This condition now applies to Phase B, with the recent approval of Substantial Conformance Application PL20230131, which modified the phasing plan.**

4. The plans for this permit (SPRMU230307) are not consistent with the phasing plan approved with DPVC-21-16. Substantial Conformance is required in order to amend the phasing plan. Approval of Substantial Conformance application PL20230131 is required prior to approval. **This was approved on 6/6/2023.**

5. Please add and label existing grade to all elevations in order to confirm compliance with overall height and average plate height standards. **These were added to sheets A310-A313.**

**Utilities Review - City** (Reviewed By: Amber Gregory ) – **No new drawings posted, all comments addressed in civil/utility drawings dated 5/18/23, which are viewable on CityView.**

4. relocate the irrigation line from the blowoff **This was previously responded to in the Applicant's markup plan posted 5/18/23 and addressed in the revised Civils posted 5/18/23. Irrigation is no longer included in the current scope and will require an update to the plans when available.**

7. provide lengths of new 4" pipe between fittings. How large is the deflection? **Dimensions provided in the Drawings posted 5/18/23, reference C.210. No longer deflection – bends now proposed where applicable.**

8. provide lengths between fittings and bend sizes **This has already been addressed – see C.240 from the Civil set posted 5/18/23.**

9. bend? **This has been addressed – see C.240 from set dated 5/18/23.**

10. Identify the number of hose bibs that will be attached to each building. **There will be one hose bib per unit in Townhome Building 1 (total of 7 units), so seven hose bibs in total for this project. These are shown on the enlarged MEP plans.**

11. Identify the square footage, if any, associated with the building. **Please reference G0003 for square footage. The total Gross Square Footage of the building (all seven townhomes) is 17,760 SF.**